

ADVANCE PRODUCT SERVICE INFORMATION

APSI NO: 103 (SUPPLEMENTS APSI 85, DATED JULY 2012)
DATE: SEPTEMBER 2014
SUBJECT: UPDATE OF E SERIES AND EX SERIES ENGINES
MODELS: 08P500, 09P600, 09P700, 093J00 OHV VERTICAL SHAFT ENGINE

This APSI provides supplemental information to APSI 85, including the addition of engine families **08P500** and **093J00** in the title block and updates to the common service specifications, fastener torque values, and new air cleaner and rewind servicing information.



This APSI provides basic servicing information in advance of the repair manual currently in development. System tests and component removal/installation procedures are common with most other Briggs & Stratton engines. See the Illustrated Parts List for service part numbers. The specifications, part numbers and/or procedures provided here are preliminary and subject to change.

Additional Engine Families

The information in APSI 85 also covers 08P500 and 093J00 engines, which were added to the product line up after the APSI was released.

New Air Cleaner Option

Some OEM applications (particularly in Europe) do not provide enough clearance for service access to the standard air filter. We have developed a new optional air cleaner package (foam filter, primer-style only) to allow improved accessibility.

Dealers can identify this air cleaner by the dual retaining clips in the housing – one clip at the top and one clip at the bottom – which differs from the standard tab-and-slot style housing. Service procedures are identical to the standard foam filter package.

Improved Rewind Starter and Blower Housing

On previous production engines, the rewind assembly required a retaining ring inside the blower housing. For current production, we have implemented changes to the blower housing, the rewind assembly, and the starter cup to eliminate the retaining ring and improve overall serviceability.

Service parts for both designs are available. See the latest Illustrated Parts Lists. It is very important to note that, except for the blower housing, original-design parts and new-design parts cannot be mixed when servicing these rewind assemblies.

Blower Housing

- The original blower housing can be used only with the original rewind and starter cup.
- The new blower housing can be used on both rewind designs.

Starter Cup

- The original starter cup can be used only with the original rewind.
- The new starter cup can be used only with the new rewind.

Rewind Assembly

- The original rewind can be used only with the original starter cup.
- The new rewind can be used only with the new starter cup.

Updated Engine Specifications

| Common Service Specifications | SAE | Metric |
|--------------------------------------|----------------|---------------|
| Armature Air Gap | .006 - .014 in | .15 - .36 mm |
| Crankshaft End Play | .002 - .028 in | .05 - 1.0 mm |
| Displacement - 08P500 | 7.63 ci | 125 cc |
| Displacement - 09P600, 09P700 | 8.64 ci | 140 cc |
| Displacement - 093J00 | 9.15 ci | 150 cc |
| Fuel Tank Capacity | .8 qt | .8 L |
| Oil Capacity | 15 oz | .44 L |
| Sparkplug Gap | .020 in | .51 mm |
| Sparkplug Torque | 180 lb-in | 20.3 Nm |
| Valve Clearance - Exhaust | .004 - .008 in | .10 - .20 mm |
| Valve Clearance - Intake | .004 - .008 in | .10 - .20 mm |

| Fastener Torque Specifications | SAE | Metric |
|--|------------|---------------|
| Air Cleaner Base to Carburetor | 25 lb-in | 2.8 Nm |
| Air Cleaner Base to Carburetor Bracket | 30 lb-in | 3.4 Nm |
| Armature to Cylinder Block | 30 lb-in | 3.4 Nm |
| Blower Housing | 35 lb-in | 4.0 Nm |
| Breather Reed | 30 lb-in | 3.4 Nm |
| Carburetor Bracket to Cylinder Head | 60 lb-in | 6.8 Nm |
| Casing Clamp | 3 lb-in | .3 Nm |
| Connecting Rod | 100 lb-in | 11.3 Nm |
| Control Bracket | 65 lb-in | 7.3 Nm |
| Cylinder Head to Cylinder Block | 130 lb-in | 14.7 Nm |
| Flywheel Brake | 35 lb-in | 4.0 Nm |
| Flywheel Guard (Blower Scroll) | 60 lb-in | 6.8 Nm |
| Flywheel Nut | 60 lb-ft | 81.3 Nm |
| Governor Lever Nut | 30 lb-in | 3.4 Nm |
| High Oil Dipstick | n/a | n/a |
| Low Oil Dipstick | 30 lb-in | 3.4 Nm |
| Muffler | 60 lb-in | 6.8 Nm |
| Muffler Guard | 25 lb-in | 2.8 Nm |
| Rocker Arm Stud | 50 lb-in | 5.6 Nm |
| Rocker Ball Setscrew | 25 lb-in | 2.8 Nm |
| Rocker Cover | 30 lb-in | 3.4 Nm |
| Sparkplug | 180 lb-in | 20.3 Nm |
| Sump to Cylinder Block | 110 lb-in | 12.4 Nm |

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